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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--------------------|---------------|----------------------|---------------------|-----------------|
| 10/767,051 | 01/29/2004 | Young-Chin Chen | U 015013-0 4814 | |
| 140 . 75 | 90 11/20/2006 | | EXAMINER | |
| LADAS & PA | RRY | | KUMAR, | PREETI |
| 26 WEST 61ST | STREET | | | |
| NEW YORK, NY 10023 | | | ART UNIT | PAPER NUMBER |
| | | | 1751 | |

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | | Application No. | Applicant(s) | | |
|---|--|---|--|--|--|
| | | 10/767,051 | CHEN, YOUNG-CHIN | | |
| | | Examiner | Art Unit | | |
| | | Preeti Kumar | 1751 | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with the c | orrespondence address | | |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | |
| Status | | | • | | |
| 1)⊠ | Responsive to communication(s) filed on 22 Au | ugust 2006. | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| | closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | |
| Dispositi | ion of Claims | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) <u>1-3</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-3</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | | | | |
| Applicati | on Papers | | , | | |
| 10) | The specification is objected to by the Examiner The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the conference of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examiner. | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d). | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | |
| a)[| Acknowledgment is made of a claim for foreign and All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prioric application from the International Bureausee the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | | |
| 2) 🔲 Notica 3) 🔯 Inform | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>6/6/05</u> . | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa | ite | | |

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DETAILED ACTION

1. Applicant's election without traverse of Group I, claims 1-3 in the reply filed on 8/22/2006 is acknowledged.

Non-Final Rejection

- 2. Claims 1-3 are pending.
- 3. Claim 1 is independent.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d) based on Application # 092102230 filed in Taiwan on 1/30/2003.
 Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Oath/Declaration

5. The oath or declaration filed 1/29/2004 is acknowledged by the Examiner.

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants recite the language of synthetic fiber fabric. The term " synthetic fiber fabric " in claim 1 is a relative term which renders the claim indefinite. The term " synthetic fiber fabric" is not defined by the claim, the specification

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does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Specifically, Applicants specification provides no guidance as to what is included or excluded by the terminology of "synthetic fiber fabric".

Also, claim 1 is indefinite because it recites the language "...transclucent printing (dyeing)..." and later within the claim recites limitation to a printing paste for dyeing and or printing to indicate that the dyeing and printing steps are the same method step. However, Applicants specification US 2004/0182821 in paragraph [0008] indicates that the process of the pending application comprises the steps of presetting, printing, drying, fixing, etching, soaping, dyeing, and final treatment. Thus the specification teaches that the printing and dyeing are 2 separate steps and the claim language seems to indicate that translucent printing and (dyeing) are synonyms of one another? Examiner does not understand if printing (dyeing) are 1 or 2 separate steps in the instant claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kielbania (US 4,507,342).

Kielbania teaches a conventional printing paste is prepared of three major ingredients: pigment, thickener and binder. Before these ingredients are mixed to form a print paste, a "cut clear" is formed with a thickener. The cut clear is a translucent gel having a consistency over 100,000 cps. The cut clear functions as a viscosity builder in the paste. Next a color concentrate is prepared by blending a presscake dispersion (a pigment dispersion in water), a cut clear, and water for about 15 minutes until a creamy flowing paste of about 1950 cps viscosity results. See col.32,ln.53-60.

In example 18a Kielbania teaches a control print paste is prepared by mixing 60 parts of a cut clear containing 6% of the nonionic thickener, 4.3 parts of 35% aqueous pigment dispersion, 30 parts water, 5.8 parts of a 60% solids acrylic binder (97 EA/3 a low energy heat curable quaternary ammonium salt vinyl monomer and 0.175 part

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sodium bicarbonate as catalyst. See examples 18 a and b. Kielbania go on to illustrate pigment printed nonwoven polypropylene by applying the pigment paste to Kimberly-Clark spunbonded pinsonic embossed nonwoven polypropylene fabric, by the screen printing process and then cured by heating in a conventional oven at 228 F. for 3 minutes.

Regarding the claimed process of printing prior to etching, Kelbania teaches crosslinking the polymer fabric with a quaternary ammonium salt to provide a particularly dyeable fabric by dyes such as acid dyes, metallized dyes and direct dyes. See col.1,ln.33, col.6,ln.30-45. Kelbania teaches that the quaternary ammonium units provide excellent dye pickup, which printing/dyeing step is a separate step prior to a subsequent chemical etching step with sodium bicarbonate catalyst. See col.8,ln.35-40 and col.14,ln.64, and example.18.

Accordingly, the teachings of Kelbania appear to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Kelbania are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a process for producing a fabric comprising a process wherein the printing with a quaternary ammonium salt printing developer is done prior to an etching step as recited by the instant claim 1 because Kelbania provides motivation to one of ordinary skill in the art to produce a patterned fabric by a 2 step process and further suggests crosslinking the polymer fabric with a quaternary ammonium salt to produce a particularly dyeable fabric, which

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printing/dyeing step is a separate step done prior to a subsequent chemical etching step with sodium bicarbonate catalyst.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

13. Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner Preeti Kumar K. Art Unit 1751

DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER

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